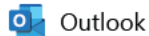


SUSTAINABILITY INSTITUTE, ET AL v. TRUMP

2:25-CV-02152-RMG

EXHIBIT E



Fwd: Sustainability Institute + EPA Check-in

From Bryan Cordell <director@sustainabilityinstitutesc.org>

Date Mon 3/31/2025 11:10 AM

To Irena Como <icomo@selc.org>; Kym Meyer <kmeyer@selcnc.org>; Kim Hayes <khayes@selc.org>

📎 2 attachments (746 KB)

SI Workplan_Sanitized March 5.docx; NSF Decision Tree and Keywords.docx;

FYI per my last email.

----- Forwarded message -----

From: **Akbar Buchanan, Ferry** <AkbarBuchanan.Ferry@epa.gov>

Date: Fri, Mar 28, 2025 at 3:05 PM

Subject: RE: Sustainability Institute + EPA Check-in

To: Bryan Cordell <director@sustainabilityinstitutesc.org>, Holtzclaw, Brian <Holtzclaw.Brian@epa.gov>, Rebekah@sustainabilityinstitutesc.org <Rebekah@sustainabilityinstitutesc.org>, mike_watershedconsults.com <mike@watershedconsults.com>

Hi all,

Thanks for the introduction meeting with me. I am sending you all two documents: Sanitized Workplan as well as the NSF list of words to avoid.

Two things:

1. Please send me some available times (1 hour slot) for us to meet next week on April 2, 3, or the following week.
2. For Bryan, please send me the Performance Measurement Plan that has a list of environmental outputs and outcomes that will be tracked.
 - a. I'll incorporate them into the spreadsheet tracker and return a draft by next week.

Thank you,

Ferry

Ferry Akbar Buchanan
Environmental Protection Specialist
U.S. EPA Region 4
Work Phone: (404) 964-0640

Office Phone: (404) 562-9482

Email: akbarbuchanan.ferry@epa.gov

-----Original Appointment-----

From: Akbar Buchanan, Ferry

Sent: Wednesday, March 26, 2025 4:42 PM

To: Akbar Buchanan, Ferry; Bryan Cordell; Holtzclaw, Brian; Rebekah@sustainabilityinstitutesc.org; mike_watershedconsults.com

Subject: Sustainability Institute + EPA Check-in

When: Friday, March 28, 2025 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

Microsoft Teams [Need help?](#)

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Meeting ID: 274 967 296 478

Passcode: vU7e5da3

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Phone conference ID: 531 392 495#

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Tenant key: sip:teams@video.epa.gov

Video ID: 116 679 284 2

[More info](#)

For organizers: [Meeting options](#) | [Reset dial-in PIN](#)

This meeting may be recorded. If the meeting is recorded, it will be announced via a banner showing "this meeting is being recorded." Participation in a recorded meeting will be deemed as consent to be recorded. Meeting recordings may be official agency records subject to appropriate policy, rules and regulations.

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Bryan H. Cordell
he, him, his
Executive Director
The Sustainability Institute
3973 Rivers Avenue, Suite 101
North Charleston, SC 29405

843.327.3573 (mobile)
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Our mission: *Advancing resilient, sustainable and equitable communities while building the next generation of conservation leaders.*

PRIVILEGED AND CONFIDENTIAL: The information in this electronic message and any corresponding attachments are legally privileged and/or confidential materials, and are the property of Bryan Cordell. This information is intended for the sole use of the individual(s) or entity(s) to which it is addressed. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or duplication of this message is strictly prohibited. If you have received this message in error, please immediately notify Bryan Cordell by telephone (843.327.3573), and purge the message received. Thank You.

Community Change Grants Track 1 - Project Narrative

Section A. Executive Summary

- **Application Title:** Advancing **Environmental and Climate Justice** in Union Heights, a **Historic Black Settlement** Community in North Charleston, SC.
- **Lead Applicant:** Sustainability Institute
- **Statutory Partner to the Lead Applicant:** City of North Charleston
- **Contact Information:**

Lead Applicant Bryan Cordell, Executive Director director@sustainabilityinstitutesc.org (843)529-3421	Statutory Partner Adam MacConnell, City of North Charleston amacconnell@northcharleston.org (843)740.5821
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- **Eligibility:** The Sustainability Institute is a tax-exempt 501(c)(3) organization.
- **Climate Action Strategy:** Energy-Efficient, Healthy, and Resilient Housing and Buildings; Workforce Development Programs for Occupations that Reduce Greenhouse Gas Emissions and Air Pollutants; Green Infrastructure and Nature-Based Solutions.
- **Pollution Reduction Strategy:** Indoor Air Quality and Community Health Improvements.
- **Grant Award Period and Completion:** Estimated beginning date: 01/01/2025. Estimated ending date: 12/31/2027.
- **Amount of EPA Funding Requested:** \$11,396,020.00
- **Target Investment Area:** N/A.
- **Disadvantaged Community to benefit from the projects:** Union Heights is a geographically-defined community identified as **disadvantaged** on the **EPA IRA Disadvantaged Communities Map**.
- **Other Sources of Funding:** The mix of activities detailed in this application are designed to catalyze EPA's investment of funds available under this unique NOFO to complement community demonstration, engagement, and education activities to advance awareness, uptake, and impact of available federal, state, local, and utility rebates; loans; and grants to reduce energy poverty, showcase low-carbon building technologies, and support economic opportunity and community power-building, while reducing greenhouse gas emissions and improving health outcomes for families. Enactment of the **IIJA** and **IRA** resulted in a transformational infusion of funds for existing programs, e.g., the Weatherization Assistance Program (WAP), the Energy Efficiency and Conservation Block Grant (EECBG) Program, and the Low-Income Home Energy Assistance Program (LIHEAP). The **IIJA** and **IRA** also extend, increase, and modify existing rebate programs, and establish new rebates for low-income households in **disadvantaged** communities like Union Heights. South Carolina expects to administer \$137 million committed by the **IRA** for consumer home energy rebate programs; however, the State continues to develop its programs prior to applying and rebates are not expected to be available in SC before 2025. By selecting this project, EPA would fund intensive activities tailored for exponential impact by maximizing consumer awareness of available and anticipated resources.
- **Resubmission Status:** This is the first submission of this request.

Section B. Project Workplan

Part 1. Community-Driven Investments for Change

1.1 Community Vision Description

Community Description: Union Heights is a “settlement community” founded by freed slaves who settled on an abandoned plantation after the Civil War. An **EPA IRA Disadvantaged Community**, Union Heights is located in the “Charleston Neck,” local vernacular for a narrow area of once-undesirable, swampy land on a peninsula between the urban centers of Charleston and modern-day North Charleston, South Carolina, and bordered to the east and west by the tidal Cooper and Ashley Rivers, respectively.

To the east of Union Heights, along the Cooper River, is the South Carolina Port Authority’s Leatherman Terminal, which serves container ships and will soon have capacity for 2.4 million cargo containers. Also to the east is the Charleston Navy Yard, a former Naval Base deactivated in 1995 and currently undergoing redevelopment. Both sites are serviced by CSX and Norfolk Southern on major rail lines with tracks that run parallel to the Union Heights community.

To the west of Union Heights are a series of two US highways and Interstate 26, as well as a 198-acre tract of land in early stages of redevelopment called the “Magnolia Project,” located in what was once a heavy-industrial zone that housed fertilizer factories, a lumber-treatment plant, and other businesses that left a legacy of contamination resulting in designation as a “Superfund” site¹. These industrial sites along with Union Heights and other adjoining residential communities comprise an area known as the “Charleston Neck.”

Located south of Union Heights is South Carolina’s most populous city, Charleston, whose historic downtown is a major center for tourism. To the north is the Park Circle area of North Charleston, a bustling district that has undergone a renaissance, attracting local businesses and restaurants to the area.

The Charleston Naval Base opened in 1901, shortly before the official establishment of Union Heights in 1910. Spanning 1,575 acres, the Naval Base grew to become a significant military and economic hub, providing defense for the United States during World War I and World War II and employment for nearly 26,000 people. Union Heights developed alongside the growth of the Naval Base, nearby mills, and plants, with most lots purchased in the 1930s to early 1960s. During this time, Union Heights was a thriving and self-sufficient working-class neighborhood, belying the deep physical and economic harm to the community as a result of government-sponsored “urban renewal” projects of the 1960s. Later, Interstate 26 would slash through the area, removing two streets and many businesses through eminent domain. This was followed by construction of Exit 218 off Interstate 26, further bifurcating the Union Heights community, which was, at the time, a **predominantly Black neighborhood** that was about 70% owner-occupied.

Population decreased in the neighborhood by 48.2% between 1980 and 1990. Then, in 1996 the Naval Base shut down, eliminating 15,000 jobs and leaving behind an aging population and little

¹ EPA ID: SCD980310239, Koppers Co., Inc. (Charleston Plant)

economic activity. Today, fewer than half of people living in Union Heights own their homes. Rapid population and **gentrification** are displacing long-term residents and diluting the community's historic identity. Most existing homes are 60 to 100 years old and in various stages of disrepair.

Union Heights has many notable community and cultural assets, including nearby schools; a community center that serves as a hub for recreation, afterschool programs, and civic engagement; many houses of worship; neighborhood-based businesses; Community-Based Organizations; and an engaged neighborhood association. Generations of residents and families who have lived in Union Heights are committed to its success and preservation.

During construction of the Leatherman Port Terminal which opened in 2021, Exit 218 off Interstate 26 was removed, leaving 2.77 acres of vacant land and homes to be transferred from the South Carolina Department of Transportation to the City of North Charleston as part of a community mitigation plan. Redevelopment of this land into affordable housing and green space – referred to in this application as “Project 218” - is viewed by residents as an opportunity to reknit and heal the community, address intertwined challenges including housing shortage and affordability, and present a path forward for future neighborhood resilience.

This application seeks to address and tie together a number of critical projects and activities in Union Heights, each of which have been prioritized by community residents and championed by community stakeholders, including:

1. Repairing, weatherizing, fortifying and upgrading the energy efficiency and resilience of fifty (50) existing homes to reduce **greenhouse gas** emissions that will result in improved health outcomes for families;
2. Project 218 – developing 2.77 acres of land formerly occupied by Exit 218 to pilot a new paradigm for energy efficient/zero-energy housing construction and affordable, resilient development by constructing 10 single-family “green” homes, with land to be transferred to and operated by a community-based land trust;
3. Constructing one “showcase” home that will be used for purposes of community demonstration, outreach, and education, and will showcase zero-energy, healthy, resilient and low-carbon technologies;
4. Expanding economic opportunity – particularly for the next generation of climate workers and leaders – by harnessing a long-standing and accredited AmeriCorps workforce training and service-learning program focused on climate-related jobs; and
5. Providing opportunities for community residents to become skillfully engaged and drive the shaping of the community's future through investments in leadership development and training.

Benefits provided by the grant will include, but not be limited to:

- increased energy efficiency in existing homes that will lead to reduced energy insecurity, financial burden, and **greenhouse gas (GHG)** emissions;
- reductions in health exposure to indoor air pollution and toxins in existing homes that will contribute to safer and healthier living environments;

- new homes constructed to zero-energy, healthy, and low-carbon standards that provide community members with access to affordable, sustainable and resilient housing;
- community reductions to climate risks;
- increased resilience from deployment of green infrastructure and nature-based solutions; and
- access to conservation jobs that reduce GHG emissions and other air pollutants.

Community Challenges:

Union Heights residents and businesses experience a number of climate-change and pollution-related challenges that cause significant impacts on people living in the community, particularly seniors and children who present acute vulnerabilities and susceptibilities.

A. Extreme Heat:

Climate vulnerabilities include exposure to extreme heat, flooding risks, and storm events. North Charleston is located in a hot, humid climate where outdoor temperatures in summer season are oppressive, averaging 91.3 degrees in July based on NOAA data for years 1991 through 2020. In addition, the number of extreme heat days is rapidly increasing. Currently, South Carolina averages 25 dangerous heat days per year; by 2050, the Palmetto State is projected to experience nearly 64 such days annually². Extreme heat is of particular concern for residents with insufficient or no access to cooling and many homes in Union Heights do not have proper cooling. Some have no air conditioning; many others have no central HVAC and require the use of window units and/or room fans; and others have aging HVAC systems that have often exceeded life expectancy, are inefficient, and are in disrepair. Seniors facing inadequate cooling are especially vulnerable to heat.

For many households in the Project Area, the cost to heat and cool the home is one of their largest expenses, with some spending upwards of \$300 to \$500 per month on electricity and gas, resulting in a disproportionate prevalence of household energy insecurity. Many homes have little to no insulation and the vast majority suffer from significant building envelope leakage. Energy use intensity is high, and many families regularly face difficulty paying their utility bills, while others experience recurring power disconnections. Households with children and people living with health vulnerabilities such as disabilities and chronic medical conditions are most at-risk.

B. Indoor Air Quality Pollution:

Because the majority of homes in Union Heights were constructed decades before the start of building codes, exposure to indoor air pollution and toxins in homes is also a concern. Home repair agencies operating in the community cite “significant numbers” of homes where carbon monoxide leaks, lead-based paint, and mold issues have been detected. Lead-based paint exposure is of concern to families because even low levels of lead in children can lead to lower IQ, slowed or stunted growth, and hearing problems.

C. Flooding:

² Killer Heat in the United States, Climate Choices and the Future of Dangerously Hot Days (2019). In UCSUSA.org. Retrieved June 30, 2024, from <https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf>

Because Union Heights is located in a coastal zone on low-lying wetlands sandwiched between two rivers, tidal flooding and storm event flooding is a severe vulnerability. In 2025, Charleston is expected to reach an inflection point and see 36 more days of significant tidal flooding in a year on average than the previous decade, nearly a threefold increase. **Sea level rise** increases vulnerability over time as it is now rising by about 1 inch every 2 years. Wetlands, which historically would have played an important function in absorbing flood waters in this area, have been mostly filled in over time. Many existing homes in the community are built on-grade and have little protection from rising waters. Flooding frequently causes local roads, including those around the neighborhood's assets, to become impassable. Finally, flooding causes pollutants from nearby industry to be carried across the community, increasing risks of exposure that impact community health.

D. Outdoor Air Pollution:

With the heavy industrial heritage of the surrounding area, exposure to outdoor pollution is a legacy issue and present-day challenge. Nearby brownfields are linked to the industrial mining that took place along the Ashley River and nearby fertilizer and chemical plants. Rail cars carrying coal still pass alongside the community on a daily basis. The community is also exposed to emissions from automobile traffic on the adjacent Interstate and hundreds of heavy-duty trucks that pass back and forth daily to access the Leatherman Terminal.

Community Vision:

The community's vision is for this grant to jump-start a series of interconnected projects and activities that, taken together, will repair and heal the fabric of the community while providing resources to residents and Community-Based Organizations to create the lasting change and power-sharing that will support the community's objectives to become more resilient, healthy, **equitable**, and sustainable for generations to come. Feedback from significant community engagement conducted over more than five (5) years has informed strategy development, aided in gap identification, and punctuated data that has been collected through decades of combined programs and services performed by grant partners in the area. From its earliest roots, Union Heights has been a place that prides itself on its self-sufficiency, even in the face of an onslaught of challenges and **barriers** – many of them rooted in **systemic racism**. The goal of this application and its proposed activities is to build on the community's foundation of lived experiences with **systemic marginalization** to develop and determine a new story all on its own: that of a historic community that overcame the worst of what man or nature could throw at it, proudly standing the test of time by transforming itself into a replicable model of resilience and sustainability through community-based, community-driven solutions and power-building. This transformation, which began generations ago, begins anew with the projects outlined as follows.

1.2 Selected Strategies Climate Action Strategies –

Strategy 3: Energy-Efficient, Healthy and Resilient Housing and Buildings:

Project #1: Fixing, weatherizing, upgrading and fortifying existing homes to increase energy efficiency, reduce greenhouse gas emissions, and produce better health outcomes for all residents.

Overall, this project is designed to tackle energy insecurity in the community by immediately

reducing energy and water costs for 50 households by 30% or more, work that also reduces GHG emissions and decarbonizes the community, reduces the urban heat island effect, improves health and safety by reducing exposures to indoor air pollutants and toxins, and makes homes more resilient to climate risks. Activities touching up to 50 homes will include:

- Up to fifty (50) homes will receive deep and comprehensive weatherization retrofits
- Up to forty (40) homes will receive “pre-weatherization” repairs
- Up to forty (40) homes will receive HVAC and/or other upgrades which include repairing or replacing leaking HVAC ductwork, replacing hot water heaters, or replacing appliances
- Up to thirteen (13) homes will receive “fortification” upgrades
- Up to thirteen (13) homes will receive a solar PV system.

Weatherizing, repairing, and upgrading existing homes in the Union Heights community ranks as the top priority for community residents based on formal and anecdotal feedback and is widely viewed by residents and stakeholders alike as the community’s most significant challenge.

Homes will be selected for repairs, retrofits, and upgrades based on data collected from the following sources:

- (a) a professional survey designed by the Joseph P. Riley, Jr. Center for Livable Communities (Riley Center) at the College of Charleston and currently being administered in the community, by community members and AmeriCorps volunteers, that seeks to identify home repair and weatherization needs;
- (b) community engagement workshops on “Energy Conservation + Healthy Homes” currently being performed in the community by CBO Collaborating Entities; and
- (c) referrals from nonprofit home repair agencies operating in Union Heights.

A data analysis performed by the Riley Center utilized county tax records to determine there are approximately 308 owner-occupied, single-family homes in the Union Heights community. Planning Department staff at the City of North Charleston similarly performed an analysis using ACS 2020 Housing data that showed 308 total housing units, which included 93 owner-occupied, 117 rental-occupied, and 98 vacant housing units. We know that some unknown number of these 93 total owner-occupied homes need substantial repair that will likely exceed 80% of the value of the home. In discussions with partner CBOs and the community, we decided that 50 of the 98 owner-occupied homes would be a fair target number of homes that would likely qualify and be good candidates for energy efficiency upgrades and repairs. Based on our community outreach plans, processes for qualifying homes and households, and estimated construction timelines, our Project Team determined that it is possible to complete up to 50 construction projects on existing homes during the 3-year grant period.

Through our proposed program, building performance experts from The Sustainability Institute, the Lead Applicant and a North Charleston-based CBO, will conduct energy audits, in accordance with national industry protocols, and inspections of each home to determine repair, weatherization and energy-efficiency upgrade needs and potential. Thirty (30) energy audits/inspections will occur in Year 1 of this grant and 20 in Year 2. Utilizing its years of experience

working in the community and well-established best practices, The Sustainability Institute will coordinate and manage repairs and upgrades and implement a robust process for quality assurance to ensure energy efficiency and health targets are achieved.

Energy audits will follow protocols set forth by Building Performance Institute (BPI) and will include pre- and post- performance testing including blower-door, duct blaster, infrared camera, and combustion appliance zone (CAZ) testing. All testing results and findings of the pre-existing homes, including photographic evidence, will be documented prior to work being completed in a comprehensive energy audit report using AriesPro cloud-based, energy auditing software platform. Energy consumption will be tracked in AriesPro with real-time utility data tracking, reporting, and analysis for a period of 3 years to identify energy consumption reductions, utility bill cost savings, and carbon footprint/ emission reductions.

Repairs will focus on critical health and safety repairs, called “pre-weatherization repairs,” that pose immediate safety risks to the home occupants and/or that are obstructing weatherization activity from taking place (typically structural, plumbing, mechanical and/or electrical repairs). For example, a roof that is leaking water and causing mold/moisture damage to an attic, which not only poses long-term health risks to occupants, but also “blocks” energy efficiency investments in the attic such as insulation upgrades. Based on our history of working on homes in Union Heights, we expect 80% of homes touched will need these repairs.

All homes will receive weatherization improvements, which include air sealing building envelopes, insulating attics and crawlspaces, and installing programmable “smart” thermostats, LED lighting, attic tents, and water-saving devices. Work will be performed following Building Performance Institute standards and improvement measures will target high savings-to-cost ratios.

Eighty percent (80%) of homes will receive additional energy efficiency upgrades which may include repairing or replacing HVAC units, repairing or replacing ductwork, replacing hot water heaters, and/or replacing appliances. Upgrades will be deployed as part of a process to replace old, inefficient heating and cooling equipment and/or to electrify a home. Fixing and replacing aging HVAC units and HVAC ductwork will equip households to stay cool during dangerous heat waves with more efficient and less costly systems to operate.

Homeowners will be responsible for all maintenance and replacement of weatherization and energy efficiency installments. However, most installments will include a warranty and will have an average life expectancy of at least ten years. Homeowners will be educated on proper maintenance and care of installments.

Twenty-five percent (25%) of homes will receive solar PV systems to offset energy use. Systems installed will be up to 5kW, sufficient to meet the power requirements of a small household. A typical 5kW solar system can produce 25kW a day and up to 700kW a month, which is 65-75% of the monthly power consumption of a typical home (920kW). Installation of solar PV will produce further energy savings for households through a clean energy source.

Twenty-five percent (25%) of homes will receive upgrades classified as “fortifications” which could include high-performance windows, new “cool” roofs, sealed crawlspaces and other measures that provide superior energy efficiency gains but can also provide durability and

climate resilience to combat multiple hazards. Many of these products would have special ratings specific to our climate zone.

Homeowners receiving weatherization and repair services will attend “Energy Conservation + Healthy Homes workshops” where homeowners learn conservation techniques that can reduce energy and water consumption and receive hands-on instruction in using common conservation products. Workshops will be held in the evenings at the Gethsemani Community Center in the neighborhood. A number of strategies will be deployed to remove barriers to participation, including providing meals for participants and child care for those who need it.

The Sustainability Institute will partner with the Union Heights Community Association and other partner CBO’s to advertise and recruit participation from the community in workshops. The schedule and flyers for workshops will be provided at community association meetings. Flyers will also be disseminated at the Gethsemani Community Center in the neighborhood, as well as through neighborhood churches. The logos of the Lead Applicant, Sustainability Institute, as well as the logo of the Statutory Partner, City of North Charleston, will appear on all meeting agendas and materials. The logos for the respective leaders of each workshop/meeting will also be on the agenda and materials. Distribution of the persons attending is estimated at: 85% public participants (local representatives including community members and representatives of the partner nonprofits and CBOs) and 15% state and local governments. We do not anticipate any program income being generated.

As part of the audit/inspection process, homes will be assessed for indoor air pollution and indoor toxins. Combustion appliance zone testing (CAZ) will be performed on every home to test for carbon monoxide leaks or high levels. Exhaust ventilation will be inspected and tested in kitchens and bathrooms to ensure proper techniques are in place for venting moist air and pollutants. Mold tests will be performed when mold is detected to inform remediation plans. And, homes will be tested for lead-based paint when certain risk factors are present. When needed, smoke and CO detectors will also be installed.

One existing home will also receive a “comprehensive home energy makeover” with leveraged funding support committed by the Wells Fargo Foundation. The goal of this aligned project is to demonstrate how energy-saving, cost-effective home improvements can reduce energy costs and enhance the value of a home. The home upgrades will promote the benefits of home energy efficiency through the eyes of a real, local family, as well as make a compelling case to home visitors and the media for the non-energy benefits that the improvements achieve in comfort, health, safety and more.

The total budget allocated to this strategy is \$2,805,195, or roughly 25 percent of the total federal funding request. Decisions about the amount of this allocation compared to other projects were made collaboratively by CBO partners and community members and were based on an evaluation of community need and prioritization.

Project #2: “Project 218” - Piloting a new paradigm for energy efficient/zero-energy housing construction and affordable, resilient development.

This project will include completing pre-development infrastructure on 2.77 acres of land and constructing 10 new single-family housing units. Overall, this strategy is designed to provide the

community with access to much-needed affordable housing – particularly for seniors –and also to produce quality constructed homes that are low-carbon, energy-efficient/ Zero-Energy Ready, healthy, durable and climate resilient. In siting this project on the Exit 218 land that was used to divide and displace the community, the project will serve to reconnect the community and heal old wounds, enhance the historic fabric of the community, and provide a path forward for future preservation and sustainability of the neighborhood.

The City of North Charleston is in the process of transferring ownership of all 2.77 acres of land to the Community First Land Trust (CFLT). CFLT's mission is to develop and steward affordable housing solutions within environmental justice mitigation communities in North Charleston to prevent gentrification and promote community sustainability. CFLT uses a model of shared equity ownership to make homes more affordable to low-income buyers. Once the 10 homes are built, CFLT will sell each home to a low-income buyer while maintaining ownership of the land.

Currently, no pre-development infrastructure has been completed on the land and therefore must be completed as a critical first step in developing the lots. Pre-development infrastructure will include roads, water and sewer, as well as innovative green infrastructure projects. The implementation of green infrastructure will help to mitigate flooding concerns and create passive cooling strategies, concerns reported by the community as extreme. The various infrastructure components were assessed to evaluate the estimated length of time needed for permitting and construction and it was determined that it is feasible to perform the entire infrastructure scope of work within the grant's 3-year period. Further, we split the infrastructure work into two phases to complete the infrastructure needed for pre-development of 10 homesites during year one of the award so that home construction can start in year two of the grant award alongside the remaining infrastructure being installed that same year. The City of North Charleston's Public Works Department will oversee and manage the implementation of all public infrastructure.

Ten (10) new single-family homes will be constructed on the Exit 218 parcel. Homes will be ENERGY STAR, Indoor airPLUS and DOE Zero-Energy Ready certified and will use innovative, low-carbon and healthy building materials in construction. ENERGY STAR homes are at least 10% more energy efficient than homes built to minimum code standards resulting in lower utility bills and reduced energy consumption. A Zero-Energy Ready home is designed to be so energy efficient that a renewable energy system could offset most or all of the home's energy use. Hempcrete, a natural biocomposite material, will be used to construct non-weight bearing insulating infill walls. It has a high vapor permeability that allows for better control of temperature in indoor environments and is considered a carbon-storing material. All homes will have solar PV installed with battery backup, providing a source of clean energy and offsetting nearly 100% of energy consumption. Homes will be designed by Root Down Building Collective (RDBC), a nonprofit, collaborating entity that specializes in architectural design, engineering and workforce training to advance bio-regional, regenerative, carbon-negative, and healthy building systems. RDBC has already produced conceptual designs and floorplans for these homes that have been reviewed by the community. RDBC is also well-versed in designing and utilizing the proposed construction methods.

Funded through this grant, the first 10 homes will be constructed in years 2 and 3 of the grant and will be ready to be occupied by the end of the grant period. Homes will be sold by CFLT as

affordable housing at 80 – 100% AMI. Sales prices will be subsidized and based upon a number of factors including AMI category, household size, current interest rates and the actual development cost per unit. CFLT will retain ownership of the land. The homeowner will be required to sign a restricted deed upon purchase/closing that ensures that the property remains affordable. The land trust may also have the first right of denial to buy the property back. In the deed, upon resell, the next buyer MUST also qualify under the same HUD affordable housing model that was utilized in the first purchase of the home. CFLT will use the proceeds from the sales to help fund construction of the remaining 20 homesites, keeping the same “green” performance and certification requirements. Construction of the first 10 homes will result in a scalable model for construction delivery, paving the way for construction of the subsequent 20 homes of Project 218 to be completed post- grant. CFLT will advise and manage the affordability criteria and process for ensuring affordability during initial sale and all subsequent sales throughout the life of the project. CFLT will also solicit prospective buyers in a way that ensures that the purchasing process is open to all that qualify and that homes are not sold to a specific cluster of the community, including soliciting buyers through community engagement sessions hosted in different areas of the community.

A Revolving Fund for Affordable Housing will be established as the mechanism through which the proceeds from the sale of homes will be held as restricted and reinvested back into construction of future housing on the Project 218 property. The Coastal Community Foundation of South Carolina has committed to establish, manage and advise the Revolving Fund. The Coastal Community Foundation of SC works to create communities rich in equity, opportunity, and well-being by uniting people and investing resources so that all community members have a pathway to achieve their goals. They have been a partner to the Union Heights community and leading voice in the preliminary planning of Project 218 up to this point, and regularly establish and manage funds on behalf of their donors and partners. The Revolving Fund will present an opportunity for the Coastal Community Foundation to maintain a strong role in the Project and help see the Project through from completion of the first 10 homes to the full buildout of the Project 218 property. The Revolving Fund will also be a mechanism through which other donors can invest and restrict their contributions to support the project in the post-grant period.

Long-term cost savings for future homeowners will be realized through the focus on high-performing, energy efficient homes. Constructing new homes to be energy efficient, Zero-Energy Ready, and low-carbon will reduce energy burden for families, increase energy security and resilience, produce GHG reductions, and help decarbonize the community. Zero-Energy Ready certification will enable homes to mostly or fully offset energy costs. Using healthy building materials in the construction such as no-VOC paints and finishes and hempcrete, keeping homes all-electric, and using proper techniques for moisture control and ventilation will ensure that newly constructed homes are healthy and safe, low-carbon, and will also contribute to positive health outcomes for the community. By implementing climate-smart, higher-performing and healthy building materials, our affordable housing projects will showcase a shift to promoting both environmental and human health in a community that has been subjected to environmental injustices and sick housing for far too long.

The total budget being allocated to this strategy is \$6,771,170, which is roughly 59 percent of the total budget. This includes the cost for infrastructure of \$2,246,300, which was evaluated and estimated by F.A. Johnson Development Group in consultation with engineering companies for

their Report, and then re-reviewed by independent engineering experts for this grant. The hard costs for construction of the 10 homes total \$3,244,500, which includes a 5% contingency. Five of those will be 1,150 square foot single family housing units with 3 bedrooms and 2 bathrooms. The total cost for each of the single-family units will be \$386,500, of which \$10,000 will cover site preparation, landscaping, and parking and \$20,000 will cover solar PV systems up to 5kW. The other five homes will be 650 square foot senior housing units with 1 bedroom and 1 bathroom, constructed in compliance with the Americans with Disabilities Act (ADA). The total cost for each of the senior housing units will be \$231,500, of which \$10,000 will cover site preparation, landscaping, and parking and \$20,000 will cover solar PV systems up to 5kW. The developer costs for all homes have been budgeted at \$310 per square foot.

Decisions about the amount of this allocation compared to other projects were made by CBO partners in consultation with community members. Additionally, our Project Team determined that it is critically important to the future viability of the site that all pre-development infrastructure be installed as part of this grant, as partners recognize that the completion of the infrastructure will make future completion of homesites infinitely easier to fund, and will ultimately result in affordable housing by offsetting the cost of the site development expenses.

Project #3: Construction of a “showcase home” for outreach, demonstration and programming.

One additional home will be constructed on one nearby vacant lot in the community that is currently owned by CFLT and ready for home construction. This will enable the project to produce a demonstration pilot home in Year 1 of the grant that will showcase the building methods and technologies that will be used in future construction. This “showcase home” will be 1,250 square feet and will be open for outreach, demonstration and programming for all 3 years of the grant period and will then be sold by CFLT as affordable housing to support future construction in the community. It will also be utilized as headquarters and office space for 3 CFLT staff members as well as SI AmeriCorps members to carry out project activities during the grant period. The interior and exterior of the home will feature active demonstrations of the materials and technologies being promoted. Building performance metrics will be assessed and tracked through the 3-year span.

The cost of designing, constructing and maintaining the showcase house is \$637,311, which is roughly 5.6 percent of the total budget. The hard costs for construction of the showcase home total \$487,725, which includes \$310 per square foot for developer costs, \$15,000 for site preparation, landscaping, and parking; \$7,000 for water and sewer tap fees; \$20,000 for solar panels, and \$35,000 for Eready Hemspray installation. It also includes a 5% construction contingency. Decisions about the amount of this allocation compared to other projects were made by CBO partners in consultation with community members.

The total cost Strategy 3: Energy-Efficient, Healthy and Resilient Housing and Buildings is \$10,213,676, which is roughly 89.6 percent of the total budget.

Strategy 1: Green Infrastructure and Nature-Based Solutions:

Union Heights and the Project 218 site face a number of complex climate challenges and risks including extreme heat, urban heat island effects, and flooding. Providing nature-based solutions as a part of the landscape plan for Project 218 as opposed to traditional infrastructure will help to

restore natural systems, capture and reduce stormwater runoff and associated pollution, improve water quality, provide shade, and produce co-benefits including reducing GHG emissions. Green infrastructure and NBS that will be deployed as part of this project will include, but not be limited to, installing pervious paving; planting native plants; planting shade trees; installing rain collection devices; and constructing rain gardens. These strategies, taken together, will reduce climate risks and improve overall resilience of the Project 218 site and community.

There are a number of environmental outputs and outcomes that will be tracked and measured as a part of this strategy which are referenced in the Performance Measurement Plan. Outputs include: # of sf of new rain gardens; # of sf of new shade canopy; # of native plants installed; # of sf of new sidewalks installed with permeable paving; # sf of impervious pavement reduced; and # rain barrels installed for residential rainwater collection. Outcomes include: increased green space as measured by sf of added greenspace and increased resilience to extreme weather and climate conditions as measured by reductions in tidal flooding and flash flooding events, improved groundwater recharge, and cooler ambient temperatures during heat waves.

The total cost Strategy 1: Green Infrastructure and Nature-Based Solutions is \$300,331, which is roughly 2.6 percent of the total budget.

Strategy 8: Workforce Development Programs for Occupations that Reduce Greenhouse Gas Emissions and Air Pollutants:

Project #4: Expanding economic opportunity through an accredited workforce training and service-learning program focused on climate related jobs.

The Sustainability Institute (SI) operates an AmeriCorps Conservation Corps program called the Environmental Conservation Corps that is an implementation partner of the American Climate Corps. The program has been operational for 15 years and is nationally-recognized and awarded.

The workforce training and service-learning program provides individuals with pathways to well-paying careers in conservation (including environmental justice) through a well-tested, high-quality and fully-accredited program that performs evidence-based conservation projects and activities. The goal of SI's program is to "create the next generation of conservation leaders while performing critically needed conservation work that promotes coastal resilience and protects the places most vulnerable to a rapidly changing climate."

Corps members serve 3, 6, 9 and 12-month terms, receive specialized training and certifications in conservation skills, are paid a living stipend, and receive a Segal education award upon graduating.

Twelve (12) Corps members serving 9-month terms in years 2 and 3 of the grant will be recruited directly from Union Heights and surrounding communities to perform conservation projects in Union Heights that focus on reducing greenhouse gas emissions and other pollutants, implementing green infrastructure, and supporting community capacity-building activities. They will be joining as part of the new American Climate Corps. At least 80% of those recruited will be joining as part of our program's long-standing "Opportunity Youth Service Initiative," which is designed to provide conservation service experience to young people aged 18-24 experiencing

barriers (e.g. poverty, unemployment, past court involvement, physical or learning disability). Non-US citizens are not allowed to participate in our program and do not receive stipends under our program. US citizenship is checked and verified as part of our participant eligibility certification process.

Conservation activities will include, but not be limited to: Organizing outreach activities; administering surveys to households that will collect data on home repair and weatherization needs as well as energy burden (through a partnership with the Riley Center); participating in energy audits and installation of energy-saving technologies in existing homes; coordinating and teaching Energy Conservation + Healthy Homes workshops in the community; tracking energy savings in homes post weatherization activities as well as other environmental outcomes; conducting tours and presentations of the “showcase home;” participating in the installation of hempcrete, solar and other sustainable materials as part of the new home construction projects; and designing and building rain gardens that will be integrated into the landscape plan for the Exit 218 project. Eighty percent (80%) of their service term, or 960 hours, will be spent engaging in these direct service opportunities. These activities will be supported and supplemented as needed by additional Corps members that are serving in SI’s Environmental Conservation Corps program.

Corps members will receive industry-recognized training, certificates and certifications in three areas: weatherization, healthy materials, and green infrastructure-nature-based solutions. These will include, but not be limited to:

- Weatherization training: Building Performance Institute (BPI) – Building Science Principles certificate and Healthy Housing Principles certificate.
- Healthy Materials training: EPA Lead Renovator: Renovations, Repairs or Painting (RRP) certification.
- Green Infrastructure – Nature-based Solutions training: Clemson University Cooperative Extension Master Rain Gardener certification and Adopt-A-Stream certified volunteer training.

The other 20% of Corps members’ service terms, or 240 hours, will be devoted to indirect service activities such as durable skills training, that includes training in financial literacy, resume writing, interviewing, engaging with mentors and in other professional development activities that will equip them to thrive in their professional careers.

We will track all workforce data. We currently track and report the number of hours of that AmeriCorps members engage in “direct service” and “indirect service” activities, the number and type of trainings, certificates and certifications participated in and earned by AmeriCorps members, and whether or not trainees were placed in and retained (and for how long) in jobs following their graduation from the program and end of term of service. These metrics are tracked through eGrants, an online system used by national AmeriCorps designed to automate the grants, project management, and reporting process for AmeriCorps programs.

Members will be paid a living stipend of \$14,400 (\$12/hour) for Crew Members or \$16,200

(\$13.50/hour) for Crew Leaders during their 9- month term of service and will receive a Segal Education Award upon graduating that totals \$5,176.50, which can be used to pay educational expenses at institutions of higher education and training programs, or to repay qualified student loans.

Member activities will be coordinated, supervised and managed by a full-time Project Coordinator, who will be employed by The Sustainability Institute, recruited directly from the community, and will work out of the showcase home located in the community for the 3-year grant period. The showcase house will also serve as the headquarters and office for the Corps members.

The total budget being allocated to this project is \$590,108, which is roughly 5.2 percent of the total budget. Decisions about the amount of this allocation compared to other projects were made by CBO partners in consultation with community members.

Other Project Activities: Providing opportunities and resources for residents to become skillfully engaged and drive the shaping of the community's future through power-building investments in leadership development and training.

The Union Heights community has identified a pressing need for training community leaders, and believes that specialized training in board development, leadership, environmental justice and advocacy will result in community leaders being better organized, positioned and having more skills to effectively participate in project activities and future resilience planning. The Riley Center will work with the community groups to design, coordinate and deliver these trainings in years 1 and 2 of the grant.

The project will also supply these communities with intensive technical support services intended to support meaningful community engagement, coalition- and capacity-building activities such as organizational development and strategic planning, grants strategy, and other technical services relating to the pursuit of federal, state, and philanthropic funding opportunities and leveraging private investment, where applicable, in support of community objectives. This will occur in years 2 and 3 of the grant.

Additionally, three individuals from the local community will be trained at the subcontractor level in hempcrete installation and finishing in Year 1 of the grant. These workers will provide the hempcrete install and the wall finishing for the 10 homes of Project 218 and will be prepared to perform the hempcrete work on the Project's next 20 homes. This is a high-demand skill as hempcrete installation is a specialized field and local contractors are currently recruiting subs from other states to perform this work. Training will be provided by Root Down Building Collective and Americhanvre Learning, a leading training provider for hempcrete cast systems.

The total budget being allocated to this project is \$291,905, which is roughly 2.6 percent of the total budget. Decisions about the amount of this allocation compared to other projects were made by CBO partners in consultation with community members.

The total cost Strategy 8: Workforce Development Programs for Occupations that Reduce Greenhouse Gas Emissions and Air Pollutants is \$882,013, which is roughly 7.7 percent of the

total budget.

Pollution Reduction Strategies:

Strategy 1: Indoor Air Quality and Community Health Improvements:

Households in the Union Heights community face high levels of indoor air pollution due to the age, condition, and leakiness of homes. Many homes were constructed prior to current codes and lack proper ventilation. Pre-weatherization repairs and weatherization of single-family homes will include activities designed to reduce sources and levels of indoor air pollution and improve community health outcomes. As part of the audit/inspection process, combustion appliance zone (CAZ) testing will be completed, homes will be inspected for proper ventilation, and when applicable, homes will be tested for mold and lead-based paint. A number of improvement strategies will be deployed as part of the retrofit process, including: fixing or removing leaky combustion equipment; improving ventilation (such as ducting kitchen and bath fans to the outside); remediating mold and lead-based paint; and installing smoke and carbon monoxide detectors. The improvements will be tracked and quantified. Reductions in CO levels will be measured and recorded.

As part of the Energy Conservation + Healthy Homes workshops, households will receive public education and resources on indoor air toxins/ toxins that can be detrimental to human health. Specifically, households will learn about mold, lead paint, radon, asbestos, fossil fuel combustion, and pollution from outdoors that infiltrates inside homes. This education will equip households to recognize, understand and monitor potential sources of indoor pollution that can be harmful to health.

Our new construction projects will prioritize healthy building materials and finishes that are “red list free,” meaning they do not contain carcinogens or any harmful VOCs known to cause adverse health effects. Red list chemicals are commonly found in cheap building materials often specified for low-income projects, such as vinyl and PVC-based interior finishes, and are high carbon emitters, sources of environmental pollution, and lead to poor indoor air quality in homes. The affordable housing units proposed under this grant will be “red list free” and will therefore enhance positive indoor air quality for the Union Heights community.

Part 2. Program Management, Capability and Capacity

2.1 Performance Management Plan, Outputs / Outcomes:

PROJECT/ ACTIVITY	OUTPUTS	OUTCOMES	PERFORMANCE TRACKING
Strategy/ Goal: Green Infrastructure and Nature-based Solutions			

<i>"Project 218" Piloting a new paradigm for energy efficient housing construction and affordable, resilient development.</i> Installation of pre-development infrastructure including green infrastructure and nature-based solutions	# Acres of predevelopment infrastructure installed	Increased green space as measured by square footage of added greenspace	Outputs related to sf or # of green infrastructure installed will be tracked and measured during installation
	# sf and acres of New community green space	Increased resilience to extreme weather and climate conditions as measured by reductions in tidal flooding and flash flooding events, improved groundwater recharge, and cooler ambient temperatures during heat waves	Improved groundwater recharge and reductions in flooding and stormwater runoff will be measured through a stormwater analysis pre- and post-installation of infrastructure
	# sf of New rain gardens		
	# sf of New shade tree canopy		
	# Native plants installed		
	# sf of New sidewalks installed with permeable paving # impervious pavement reduced # Rain barrels installed for residential rainwater collection		Cooler ambient temperatures will be measured through temperature tests/ sensors
Strategy/ Goal: Energy-efficient, Healthy, Resilient Housing and Buildings			
<i>Fixing, weatherizing, upgrading and fortifying existing homes to increase energy efficiency and produce better health outcomes for families.</i> Energy audits/ inspections "Pre-weatherization" repairs Weatherization activities Energy efficiency upgrades Renewable energy installation Fortification upgrade. Energy Conservation + Healthy Home workshops for households	# Community survey of households	Lowered electricity consumption	Household surveys and analyzed with survey assessment report
	# Home energy audits performed	Lowered consumption of home heating fuels and reductions in associated climate pollutants	Audit reports with air sealing, insulation and other EE and health improvements quantified
	# Air sealings completed		
	# Homes insulated	Lowered indoor emissions of Hazardous Air Pollutants	
	# Programmable, smart thermostats installed	Increased number of homes connected to PV solar	Reductions in energy consumption measured and tracked for 3 years
	# HVAC upgrades/ replacements	Increased community awareness of energy conservation	Reduction in carbon emissions measured and tracked for 3 years
	# Electrification/ replacements of natural gas appliances	Increased community awareness of indoor air quality pollutants and sources	
	# Installations of PV solar systems totaling 65kW renewable generation capacity installed	Increased access to energy sources with low air pollution and carbon emissions	Surveys of all workshop participants to measure increases in awareness/ knowledge
	# Fortification upgrades		
	# workshops on Energy Conservation + Healthy Home and # participants		Surveys of households receiving services to assess improvements in health and safety
<i>"Project 218" Piloting a new paradigm for energy efficient housing construction and affordable, resilient development.</i> Construction of new energy efficient, ENERGY STAR and DOE Zero-energy Ready homes Construction of a "showcase" house Installation of renewable energy systems	# design charrettes held	Increased involvement of individuals and more community input from disadvantaged communities in planning and decision-making processes	Tracking of # individuals attending charrettes and meetings
	# Project Advisory Council meetings held		
	# neighborhood association meetings attended	Increased access to affordable, energy-efficient homes	Tracking of # households occupying new homes & # homes connected to resilient power source
	# new DOE Zero-energy ready & EnergyStar certified homes constructed	Increased # of homes connected to a resilient power source	Surveys of households occupying new homes to collect data on & measure reductions in energy burden
	# showcase house for outreach, education and workforce development purposes constructed	Increased access to clean energy sources with low air pollution and carbon emissions	
	# renewable generation capacity installed		

Strategy/ Goal: Workforce Development Program for Occupations that Reduce Greenhouse Gas Emission and Air Pollution			
Expanding economic opportunity through an accredited workforce training and service-learning program focused on reducing GHG emissions and air pollution. Recruitment, training and job placement of AmeriCorps service members	# Individuals who receive wages/ stipends and supportive services delivered to enable community members' participation in workforce training programs	Increased wages, benefits, job quality, and job security for participants in workforce training program Increased literacy among participants about environmental sectors and skills required to pursue these jobs	Documentation of service hours completed, trainings participated in, certifications and certificates earned, and status of graduation occurs through an eGrants platform provided through AmeriCorps, and is all data reported to AmeriCorps on midterm and final reports
	# Trainings provided		
	# Certifications and certificates earned	Increased knowledge and skills on weatherization, home repair, energy efficiency and home health and safety practices, techniques, risks, and opportunities	
	# Member service hours completed (both direct and indirect)		
	# Graduating from training program # Individuals hired and retained into high-quality jobs to reduce air pollution and GHG emissions		Documentation of individuals hired and retained into jobs gets tracked through member check-in process that occurs at 1, 3, 6 and 12 - month intervals and is reported through a Corps Member Database

2.2 Project Linkages to the EPA Strategic Plan:

Our project activities support and advance EPA Strategic Plan Goal 2 (Take Decisive Action to Advance Environmental Justice and Civil Rights) and EPA Objective 2.1, (Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels) in the following ways:

- Reducing high energy burden of low-income and Black households through weatherization, home repair and upgrade work. These activities are designed to lower the costs for these households to heat, cool and operate their homes, as well as produce health benefits. Low-income households devote up to three times as much income to energy costs as do other, higher-income households. The median energy burden of Black households is 43% higher than that of white (non- Hispanic) households. High energy burdens are also correlated with greater risk for respiratory diseases, increased stress and economic hardship, and difficulty in moving out of poverty.
- Tackling and solving indoor air pollution in residential homes, a long-standing public health problem in the Union Heights community. Activities will identify and solve sources of indoor air quality pollution and reduce exposure for households, as well as increase public awareness and increase environmental health literacy.
- Providing a way to reknit and heal a community that was previously fragmented and separated through racist transportation policies, by reconnecting land and using it to develop affordable housing.
- Providing workforce development for occupations that reduce greenhouse gas emissions

- and air pollutants for individuals that are economically disadvantaged, resulting in increased skills, wages, benefits, job quality and job security.
- Providing green infrastructure and nature-based solutions that reduce climate risks. Low-income households and BIPOC communities are disparately affected by the impacts of climate change.

Our project supports and advances the following EPA Strategic Plan Goals:

Goal 1 - Tackle the Climate Crisis: by reducing emissions from energy use in homes that cause climate change through weatherization and energy efficiency upgrades; by accelerating resilience and adaptation to climate change impacts through upgrades to existing homes, new construction of zero-energy ready homes, and through green infrastructure and nature-based solutions that will be deployed as part of the infrastructure investments for Project 218.

Goal 4 - Ensure Clean and Healthy Air for All Communities: by reducing exposures to indoor air quality pollutants in existing homes and by ensuring newly constructed homes are “red list free” and meet stringent goals and requirements for healthy indoor air.

Goal 6 - Safeguard and Revitalize Communities: by restoring the Project 218 land for productive uses and healthy communities.

Goal 7 - Ensure Safety of Chemicals for People and the Environment: by requiring that newly constructed homes do not use red list chemicals in materials and construction.

2.3 CBO Experience and Commitment:

The Sustainability Institute (“SI”) is a 501(c)(3) organization based in North Charleston, South Carolina with a mission of advancing resilient, sustainable and equitable communities while building the next generation of conservation leaders. Our diverse portfolio of work spanning more than two decades has included climate action planning for government agencies, a broad range of job/workforce training programs, a city-wide energy efficiency program, a home weatherization and repair program, a commercial green building certification program, and an AmeriCorps service-learning program focusing on environmental conservation.

We have an intense focus on conducting community outreach and empowering vulnerable and marginalized families and communities. This work has developed our reputation as the go-to resource in our region for expertise on sustainability and technical training in conservation, a trusted partner to neighborhoods undergoing change, and a place where at-risk and disadvantaged people find a voice and opportunity through service-learning and a supportive environment.

We have operated our AmeriCorps program for 13 years in affiliation with the national Corps Network and provided service-learning for more than 200 AmeriCorps members. We are a fully Accredited Corps, having achieved accreditation in 2022 from the Corps Center of Excellence. We have operated our weatherization program for more than 13 years, performing retrofits on more than 500 homes for low-income families in our community and operating weatherization

pilot programs for the Department of Energy's Better Buildings Neighborhood Program (through the Southeast Energy Efficiency Alliance), for utilities such as South Carolina Electric & Gas, for local governments such as Charleston County, and for philanthropic foundations such as the Home Depot Foundation.

Our organization has had deep engagement with the Union Heights community and surrounding communities for more than 18 years and maintains a trusted partnership with the Community Council, community leaders, and residents. Over the years we have performed intensive community outreach, completed 11 comprehensive weatherization/home repair projects in the neighborhood, installed green infrastructure projects, and provided hundreds of community members with educational workshops routinely through the Gethsemani Community Center and neighborhood churches.

2.4 Programmatic and Managerial Capability and Resources:

The Sustainability Institute is well-positioned to successfully carry out the project and complete, oversee and manage the award. SI is a nonprofit 501(c)(3) organization as defined by 2 CFR 200.1 and is eligible to serve as the Lead Applicant and enter into a Statutory Partnership with the City of North Charleston, a local government as described in NOFO Section III.A. The roles and responsibilities of the organization outlined in the application have been successfully carried out by the organization in other federal awards or grant-funded projects. SI has partnered with all of the collaborating CBOs and entities of this project before, has a long history of working in underserved communities in the region including in Union Heights, and has a reputation for being well-trusted in the communities served. It also has deep experience serving in the role as a backbone organization and organizing cross-sector groups of partners for collective impact initiatives around energy efficiency and workforce development. In this role, SI often works to guide vision and strategy; support aligned activities; establish shared measurement practices; build public interest and will; and mobilize funding.

The City of North Charleston was incorporated June 12, 1972; is a unit of government within the State of South Carolina as defined by 2 CFR 200.1; and is eligible to enter into a Statutory Partnership with a CBO as described in NOFO Section III.A. North Charleston has a long history of supporting community sustainability and revitalization efforts. The City's achievements have been recognized through the National League of Cities Award for Municipal Excellence for Sustainable Revitalization and the Home Depot Foundation's Award of Excellence for Sustainable Community Development.

SI has specific organizational experience and capacity related to performing the proposed projects in this grant. SI has more than 13 years of experience performing weatherization and energy efficiency upgrade work and has weatherized more than 500 low-income housing units through various programs it has managed as part of the Department of Energy's Better Building Program, utilities, county government and foundations. SI is the only nonprofit operating outside of the state-funded community action agencies in South Carolina performing volume weatherization work, and outpaces most of those regional agencies in annual quotas. SI will weatherize and repair approximately 75 – 100 homes in the 2024 year across 4 counties of the state. All work, quality control, and training are performed to Building Performance Institute (BPI) standard work specifications. SI also advises both the South Carolina Energy Office and

South Carolina Office of Resilience on weatherization and building performance as a technical consultant.

Many of the activities that will be performed by SI for this grant will be performed as a part of its AmeriCorps program, which is a Federally funded and accredited conservation Corps program that the organization has successfully managed for 13 years. Over that period, more than 200 AmeriCorps members have served in the program and the program has produced two national AmeriCorps Member of the Year awardees (out of more than 30,000 members serving nationally), and one State Commission Member of the Year.

As the Lead Applicant, The Sustainability Institute has a long history of successfully managing Federal awards and is experienced in adhering to compliance with applicable reporting requirements. SI's Executive Director has managed more than \$10 million in grant programs, including more than \$5 million in Federal awards, has been employed with the organization for 18 years, and is well-versed in program and financial compliance. SI's Director of Finance is a certified public accountant and has more than 13 years of experience in managing nonprofit finances and overseeing financial compliance and reporting. SI's Director of Conservation, who will oversee AmeriCorps program activities, has worked for the organization for more than 2 years and serves as the Program Director for the organization's Federally funded AmeriCorps program. SI's AmeriCorps program is one of a select group of Corps programs operating nationally that is a part of the Corps Network's Corps Center of Excellence Accreditation program. Accredited Corps undergo a rigorous in-depth review of general operations, youth programming operations, governance standards, financial management practices, and risk management guidelines. SI's Program Director for Weatherization and Construction, who will oversee home weatherization and repair activities in existing homes, has more than 6 years of experience in the industry, is a certified Home Energy Rater and Building Performance Institute Building Analyst, and has overseen more than 75 weatherization and home repair projects for SI in the past 12 months.

A projected milestone schedule for the proposed projects (up to three years) has been included in ATTACHMENT G- READINESS APPROACH. Included is a breakout of the project activities into phases with associated tasks and timeframes for completion of tasks, procedures, and controls for ensuring that the award funds will be expended in a timely and efficient manner while ensuring that costs are eligible, reasonable, and allowable.

The Sustainability Institute is financially stable and has a history of managing finances well. In 2023, SI had \$710,941 in net operating income and ended the year with \$938,922 in net assets. SI is in the process of completing an independent audit of the 2023 year, but the last external financial review performed in 2022 produced no material modifications. The organization has strong governance practice, policies and procedures in place, which are reviewed and updated annually. Additionally, the organization has been fully accredited by the Corps Network, which requires an in-depth review of its general operations, youth programming operations, governance standards, financial management practices, and risk management guidelines. Its AmeriCorps program utilizes a robust Operations Manual and Member Handbook which are reviewed by AmeriCorps and provide policies and procedures for program management, oversight, and risk reduction. SI regularly performs formal reporting on program outcomes and program and organizational finances to funders, including federal, state and local governments as well as

foundation funders.

Staff is required to receive certificate training in performing National Service Criminal History Checks, Key Concepts of Financial Grants Management, and Fraud Awareness. SI has formal controls and governance policies in place including, but not limited to, Code of Ethics; Whistleblower Protection; Conflict of Interest; Fraternalization; Prohibited Activities; Financial Controls; Capitalization; Gift Acceptance; Records Retention and Document Destruction; Cybersecurity; and more.

2.5 Past Performance:

1. Corps Network, PY 2022-2023. Project Period October 1, 2022 - September 30, 2023. Source of funds: Federal through AmeriCorps. Award Amount: \$111,137.

The Sustainability Institute was able to successfully complete and manage the agreement. The grant required the submission of a mid-term and final report which documented progress towards achieving expected results, including progress meeting certain required program performance measures. SI met its obligations under this grant and both reports were submitted on-time with no post-submittal modifications required. This grant award also required a 20% match which SI successfully provided. Successful operation of this program and management of this grant was a factor in being awarded a new grant for an increased amount for PY 2023-2024.

2. Charleston County Community Services, 2022 Treasury Department American Rescue Plan Act. Project Period July 1, 2022 – December 31, 2023. Source of funds: Federal through the U.S. Treasury Department. Award Amount: \$250,000.

The Sustainability Institute was able to successfully complete and manage the grant agreement. The grant award supported weatherization and home repair activities, including 40 energy audits and 20 weatherization and repair projects. The grant required reporting through a monthly reporting and cost reimbursement submission. All reports and cost reimbursement requests were submitted on time and were granted. All funds were fully spent and all work was completed successfully and on time. Successful operation of this program and management of this grant was a factor in being awarded a new grant in an increased amount for the 2024 year.

3. Sol Systems/ Google, “Closing the Pre-Weatherization Gap Initiative.” Project period January 12, 2023 – December 31, 2023. Source of Funds: Corporate/ philanthropic. Award Amount: \$200,000.

The Sustainability Institute was able to successfully complete and manage the grant agreement. The grant award supported “pre-weatherization” home repair activities, including executing 30 “pre-weatherization” repair projects. The grant required reporting through a quarterly reporting submission process that included SI providing an overview of the supported measures, project results, and learning outcomes. SI was also required to participate in monthly check-in calls, as well as in an in-person site visit. All reports were submitted on time, all funds were fully spent and all work was completed successfully and on time. Successful operation of this program and management of this grant was a factor in being awarded a new grant in the same amount for the 2024 year.

3.2 Feasibility:

All projects in this application – individually and collectively –can successfully and effectively be performed within the 3-year grant period of performance as demonstrated in the Readiness Approach. A preliminary project feasibility study has been completed and pre-planning activities are already in progress. The weatherization, repair and energy efficiency projects are very similar in scope to services historically and currently performed by The Sustainability Institute. The feasibility of the infrastructure and housing construction projects have been well-studied, site control is already in place by a Statutory Partner (City of North Charleston), and the City of North Charleston is prepared to execute permitting and project activities as specified. Preliminary design work for both the site and the homes has already begun. The workforce training activities are an extension of a program already in place. The community leadership development activities are very similar in scope to services historically and currently being provided by the Riley Center in other underserved communities.

3.3 Sustainability:

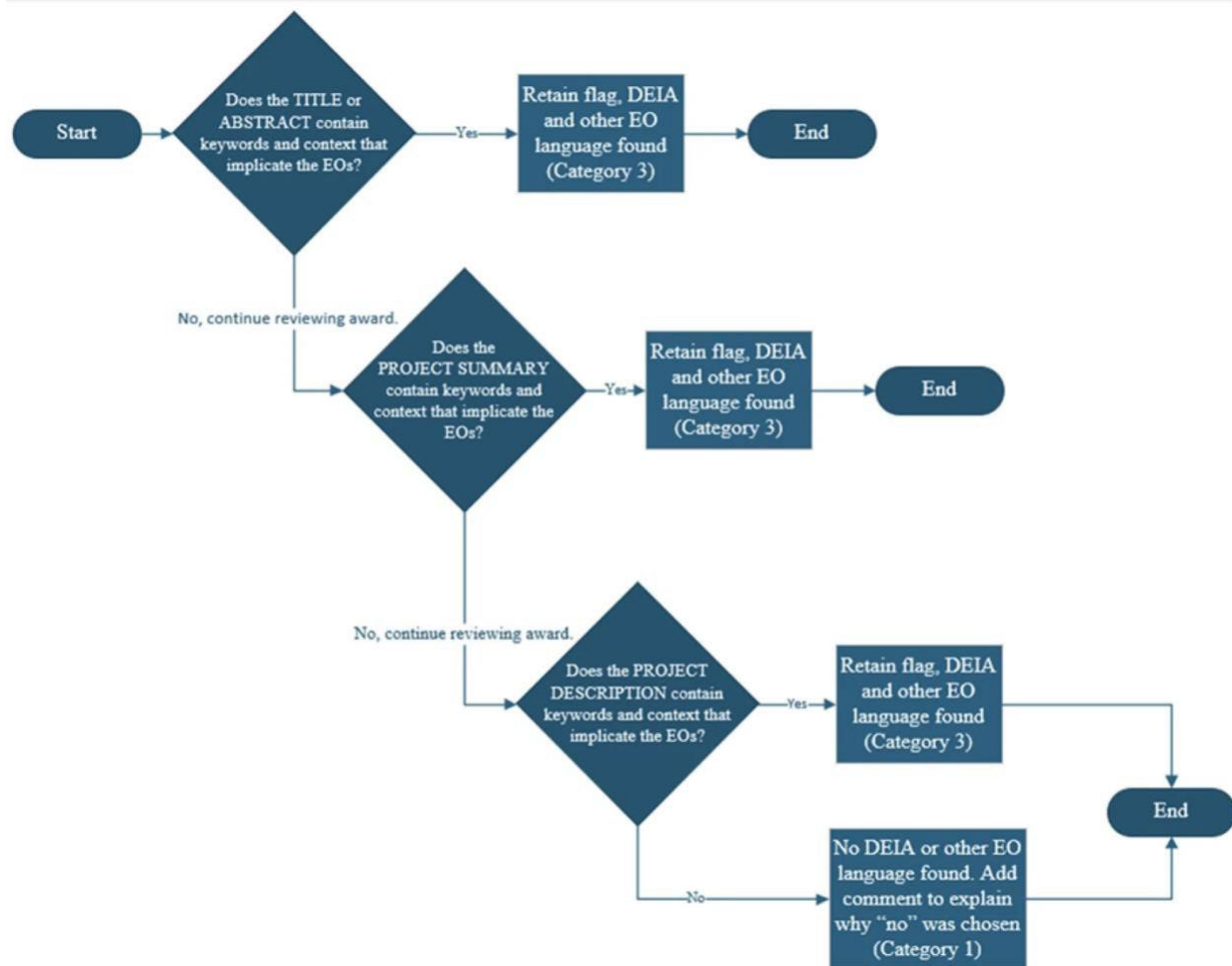
After the 3-year project execution period, we can assure that the projects contained in this application can be sustained. The only activities of this grant that will require future operation and maintenance activities beyond the grant term are contained within Project 218 and include the maintenance of the public infrastructure (streets and sidewalks), which is a responsibility and obligation of the City of North Charleston, maintenance of the private infrastructure (common areas to be maintained and operated by Community First Land Trust), and the temporary maintenance and operation of the 10 homesites by Community First Land Trust (before sale to private buyers). Community First Land Trust is both committed to these responsibilities and has the necessary resources. Additionally, proceeds from the sale of the 10 homes in Phase 1 will help fund ongoing operation and maintenance costs for the site.

3.4 Program Budget Description:

For a detailed breakdown of the budget in template form, subawards and scheduled activities to complete projects, see ATTACHMENT A – BUDGET and ATTACHMENT G – READINESS APPROACH. For a detailed description of the methodology for reaching disadvantaged populations in the community, see ATTACHMENT E–COMMUNITY ENGAGEMENT PLAN.

Project Component Budget

1. Project #1: Home Energy Retrofits -- \$2,805,195
2. Project #2: “Project 218” -- \$6,771,170
3. Project #3: Showcase House -- \$637,311
4. Project #4: Workforce Training -- \$590,108
5. Project #5: Community Engagement and Leadership Training -- \$300,331
6. Project #6: Green Infrastructure and Nature-Based Solutions -- \$291,905

Decision Tree

Keywords

activism	genders	social justice
activists	hate speech	sociocultural
advocacy	excluded	socioeconomic
advocate	female	status
advocates	females	stereotypes
barrier	fostering inclusivity	systemic
barriers	gender	trauma
biased	gender diversity	under appreciated
biased toward	genders	under represented
biases	hate speech	under served
biases towards	hispanic minority	underrepresentation
bipoc	historically	underrepresented
black and latinx	implicit bias	underserved
community diversity	implicit biases	undervalued
community equity	inclusion	victim
cultural differences	inclusive	women
cultural heritage	inclusiveness	women and
culturally responsive	inclusivity	underrepresented
disabilities	increase diversity	
disability	increase the diversity	
discriminated	indigenous community	
discrimination	inequalities	
discriminatory	inequality	
diverse backgrounds	inequitable	
diverse communities	inequities	
diverse community	institutional	
diverse group	lgbt	
diverse groups	marginalize	
diversified	marginalized	
diversify	minorities	
diversifying	minority	
diversity and inclusion	multicultural	
diversity equity	polarization	
enhance the diversity	political	
enhancing diversity	prejudice	
equal opportunity	privileges	
equality	promoting diversity	
equitable	race and ethnicity	
equity	racial	
ethnicity	racial diversity	
excluded	racial inequality	
female	racial justice	
females	racially	
fostering inclusivity	racism	
gender	sense of belonging	
gender diversity	sexual preferences	